

Abstract

Project Name: *Employee Management Application*

The Employee Management Application is a web-based system that simplifies employee-related tasks within an organization. This project focuses on automating key administrative functions, including managing employee records, tracking attendance, monitoring performance, and assigning departments. The main goal is to reduce manual data handling, minimize paperwork, and enhance efficiency in HR operations.

The core problem being addressed is the lack of a centralized and user-friendly system for managing employee data in small to mid-sized companies. Often, such organizations rely on spreadsheets or paper-based records, which are prone to errors and inefficiencies. The intended users of this application include **administrators** who manage organizational structures and **employees** who require easy access to their attendance, leave, and payroll information.

Two primary **personas** are considered in the system:

- **Admin:** Has full control over the application, including managing employees, departments, attendance, leave requests, and payroll.
- **Employee:** Can view and update their personal details, apply for leave, view attendance history, and access payroll records.

The development of the project will be carried out in three key stages. Initially, a static frontend using HTML, CSS (with Bootstrap), and JavaScript will be created to define the user interface and layout. Next, backend functionality will be introduced using **Node.js** and **MySQL** to enable CRUD operations and secure data storage. Finally, the application will evolve into a dynamic frontend using **React.js**, allowing for seamless user interactions, real-time updates, and an enhanced user experience. This layered approach ensures a scalable and maintainable solution that grows in functionality as the project progresses.